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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/826,370	04/19/2004	Sung-Hoon Kim	P57054	1039
7590 Robert E. Bushnell Suite 300 1522 K Street, N.W. Washington, DC 20005-1202			EXAMINER LAI, DANIEL	
			ART UNIT	PAPER NUMBER
			2617	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		03/20/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/826,370

Applicant(s)

KIM ET AL.

Examiner

Daniel Lai

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☒ Claim(s) 5 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 April 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 10/826,370.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the “router module” in line 2 of claim 5 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The Abstract of the disclosure is objected to because it has over 150 words. Correction is required. See MPEP § 608.01(b).

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Applicant is reminded of the proper language and format for an Abstract of the disclosure.

The Abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the Abstract not exceed 150 words in length since the space provided for the Abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The Abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Claim Objections

Claim 5 is objected to because of the following informalities: the word "rout" in line 5 of claim 5 appears to be "route" and for examination purposes will be treated thus. Appropriate correction is required.

Claim Rejections - 35 USC § 103

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out

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the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1, 3-5, 8-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kil (US 2001/0046859) in view of Julka et al. (US 2002/0193110, hereinafter Julka).

Regarding claim 1, Kil discloses a system (Abstract) with a public wireless network (Abstract, paragraph 7) having a public network data location register (paragraph 28, where Kil discusses Home Location Register) and a public network access network control (Fig. 1 (a BSC is shown)). Kil discloses a private wireless network interfacing with the public wireless network (paragraph 12, Fig. 1) and providing private wireless data service (claim 17). Kil discloses a private access network control coupled to the public network access network control (ANC) (Abstract, where Kil discusses base station transceiver subsystems are connected to base station controller and public and private networks are connected). Kil further discloses an access network transceiver system having a defined wireless area (paragraph 30). Kil does not disclose pANC is adapted to provide a link between the private network and the public network and pANC is adapted to request session information of a private network terminal to perform terminal authentication through the public network data location register and to allocate a traffic channel and establish a SVC to provide a private network connection. Kil also lacks ANTS is adapted to analyze a message sent from the terminal and to request one of the public network access network control to perform the corresponding public network. However, it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be

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employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations *Ex parte Masham* 2 USPQ2d 1647 1987).

Kil lacks the public and private networks and the devices are EV-DO. Julka discloses mobility management between two networks (Abstract, paragraph 27; Fig. 1). Julka discloses the mobility management supports EV-DO networks (paragraph 10). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the system for managing a public and a private network as disclosed by Kil with the EV-DO networks disclosed by Julka to provide higher bandwidth for communication between user and access network (Julka, paragraph 3 and 4).

Regarding claim 9, Kil discloses a method (Abstract) for providing a public wireless network including a public network data location register and a public network access network control (paragraph 28). Kil discloses interfacing a private wireless network with a public wireless network (Abstract, paragraph 7). Kil discloses the private wireless network adapted to perform network connection request (paragraph 12) including analyzing a message received from a private network terminal to request a public or private network access connection upon an access network transceiver receiving one of a public network call request and a private network call request and public call request (paragraph 12, where Kill discusses "Upon receipt of a service request from a mobile terminal through at least one of the base station transceiver subsystems including the private base station transceiver subsystem, the system determines whether the requested service is a public mobile communication service or a private mobile communication service). The private wireless network is adapted to perform a session information allocation including requesting and receiving the DLR to provide terminal session information for terminal

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authentication performance (paragraph 73). Kil further discloses the private wireless network is adapted to perform a network connection including performing the authentication according to the received session information and performing the private network connection with the private access network control (paragraph 73-74).

Kil lacks the public and private networks and the devices are EV-DO. Julka discloses mobility management between two networks (Abstract, paragraph 27; Fig. 1). Julka discloses the mobility management supports EV-DO networks (paragraph 10). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the system for managing a public and a private network as disclosed by Kil with the EV-DO networks disclosed by Julka to provide higher bandwidth for communication between user and access network (Julka, paragraph 3 and 4).

Regarding claims 3, 4, 10 and 11, Kil discloses a data location register (paragraph 31, where Kil discusses Home Location Register (HLR) has subscriber location registration function and stores subscriber data (authentication information). Kil further discloses the HLR provides information needed for call processing (paragraph 73 and 79, where Kil discloses registration and registration service end).

Regarding claims 5 and 12, Kil discloses a public and private communication unit 12 determines whether the telephone call is a call for the public mobile communication service or a call for the private mobile communication service (paragraph 81) and route the call to the associated network (paragraph 81).

Regarding claim 8, Kil discloses a WSM (paragraph 51). Kil further discloses the WSM is used to maintain and manage the whole mobile communication service function provided from the public and private communication service unit (paragraph 62).

Claims 2, 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kil in view of Julka as applied to claim 1 above, and further in view of 3GPP2 A.S0007-A v1.0 "Interoperability Specification (IOS) for High Rate Packet Data (HRPD) Access Network Interfaces - Rev A.", hereinafter A.S0007-A.

Regarding claim 2, Kil discloses many limitations of claim 1 as applied above. The reference lacks an A14 interface. A.S0007-A discloses Interoperability Specification for HRPD access network interfaces. A.S0007 discloses an A 14 interface used for performing HRPD session and HRPD mobility related operations and supports procedures such as terminal authentication and session release (2-7, line 1-10). It would have been obvious to one having ordinary skill in the art at the time of the invention to combine the system for managing a public and a private network as disclosed by Kil with the A14 interface disclosed by A.S0007-A so that supports can be provided for authentication and release procedures.

Regarding claims 6 and 7, Kil discloses many limitations of claim 1 as applied above. The reference lacks an AN AAA entity and a PDSN. A.S0007-A discloses an AN AAA entity that performs terminal authentication and authorization functions for an access network (1-4, line 11-12) and a PDSN to serve packet data (1-6, Fig. 1.5-1). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the system for managing a public and a private network as disclosed by Kil with the AN AAA entity and the PDSN

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disclosed by A.S0007-A so that the system can be used to authenticate users to receive packet data.

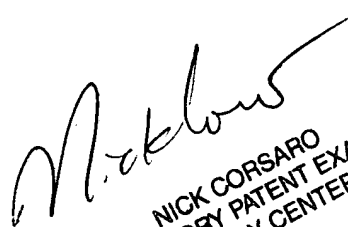
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel Lai whose telephone number is (571) 270-1208. The examiner can normally be reached on Monday – Thursday, 9:00 a.m. – 4:00 p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nick Corsaro can be reached on (571) 272-7876. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DL DL..


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